

AMENDMENTS TO THE CLAIMS:

Please amend the claims as follows. The claims are in the format as required by 37 C.F.R. § 1.121.

1. (Currently Amended) A method for searching an applied data model, comprising:
~~initiating a typing system, wherein the typing system defines and instantiates components and relationships types for searching the applied data model;~~
translating a query to a set of statements operable to search the applied data model to an arbitrary level,
 wherein the applied data model is a representation of an arbitrarily complex environment and comprises at least one component and an associated a relationship corresponding to the at least one component,
 wherein the at least one component represents an entity in the arbitrarily complex environment,
 wherein the relationship represents an association between the entity and other entities in the arbitrarily complex environment, and
 wherein the query is a component query or a relationship query;
searching the applied data model to the arbitrary level based on the set of statements translated from the query,
 wherein the query is in a first query language, and
 wherein the set of statements is capable of execution by a database management system supporting a second query language;
producing a set of replies to the set of statements, wherein the set of replies includes at least one component or one relationship at the arbitrary level; and
processing the set of replies ~~based on~~ according to the query.
 2. (Original) The method of claim 1, wherein the set of statements is tailored to a table schema.
 3. (Original) The method of claim 2, wherein the table schema implements a data model.
 4. (Original) The method of claim 3, wherein the table schema represents a graph of the applied data model.
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5. (Original) The method of claim 4, wherein the set of statements is operable to perform a graph search.
6. (Original) The method of claim 5, wherein the graph search is a breadth first graph search.
7. (Original) The method of claim 6, wherein the set of statements is in SQL.
8. (Original) The method of claim 2, wherein processing the set of replies comprises structuring the results.
9. (Original) The method of claim 8, wherein the results are structured based on the query.
10. (Original) The method of claim 9, further comprising returning the processed results.
11. (Original) The method of claim 10, wherein the processed results are formatted based on the query.

12. (Currently Amended) A computer readable medium having code for modeling an arbitrarily complex environment, wherein the code is embodied within computer readable medium, the code comprising instructions for:

~~initiating a typing system, wherein the typing system defines and instantiates components and relationships types for searching the applied data model;~~

translating a query to a set of statements operable to search ~~the~~ an applied data model to an arbitrary level,

wherein the applied data model is a representation of the arbitrarily complex environment and comprises at least one component and an associated a relationship corresponding to the at least one component,

wherein the at least one component represents an entity in the arbitrarily complex environment,

wherein the relationship represents an association between the entity and other entities in the arbitrarily complex environment, and

wherein the query is a component query or a relationship query;

searching the applied data model to the arbitrary level based on the set of statements translated from the query,

wherein the query is in a first query language, and

wherein the set of statements is capable of execution by a database management system supporting a second query language;

producing a set of replies to the set of statements wherein the set of replies includes at least one component or one relationship at the arbitrary level; and

processing the set of replies ~~based on~~ according to the query.

13. (Original) The computer readable medium of claim 12, wherein the set of statements is tailored to a table schema.

14. (Original) The computer readable medium of claim 13, wherein the table schema implements a data model.

15. (Original) The computer readable medium of claim 14, wherein the table schema represents a graph of the applied data model.

16. (Original) The computer readable medium of claim 15, wherein the set of statements is operable to perform a graph search.

17. (Original) The computer readable medium of claim 16, wherein the graph search is a breadth first graph search.

18. (Original) The computer readable medium of claim 17, wherein the set of statements is in SQL.

19. (Original) The computer readable medium of claim 13, wherein processing the set of replies comprises structuring the results.

20. (Original) The computer readable medium of claim 19, wherein the results are structured based on the query.

21. (Original) The computer readable medium of claim 12, further comprising returning the processed results.

22. (Original) The computer readable medium of claim 21, wherein the processed results are formatted based on the query.

23. (Currently Amended) A method for searching an applied data model, comprising:
initiating a typing system, wherein the typing system defines and instantiates
components and relationships types for searching the applied data model;
translating a query to a set of statements operable to search the applied data model to
an arbitrary level,
wherein the applied data model is a representation of an arbitrarily complex
environment and comprises at least one component and an associated a relationship
corresponding to the at least one component,
wherein the at least one component represents an entity in the arbitrarily
complex environment,
wherein the relationship represents an association between the entity and other
entities in the arbitrarily complex environment, and
wherein the query is a component query or a relationship query in a first query
language,
wherein the set of statements is capable of execution by a database
management system supporting a second query language, and
wherein the set of statements is tailored to a table schema which implements the
applied data model;
searching the applied data model to the arbitrary level based on the set of statements,
wherein the set of statements implements a graph search;
producing a set of results to the set of statements, wherein the set of results includes at
least one component or one relationship at the arbitrary level; and
processing the set of results based on according to the query, wherein processing the
set of results includes structuring the set of results based on the query.
24. (Previously Presented) The method of claim 1, wherein the query specifies the arbitrary
level.
25. (Previously Presented) The method of claim 12, wherein the query specifies the
arbitrary level.
26. (Previously Presented) The method of claim 23, wherein the query specifies the
arbitrary level.